

FIG. 1

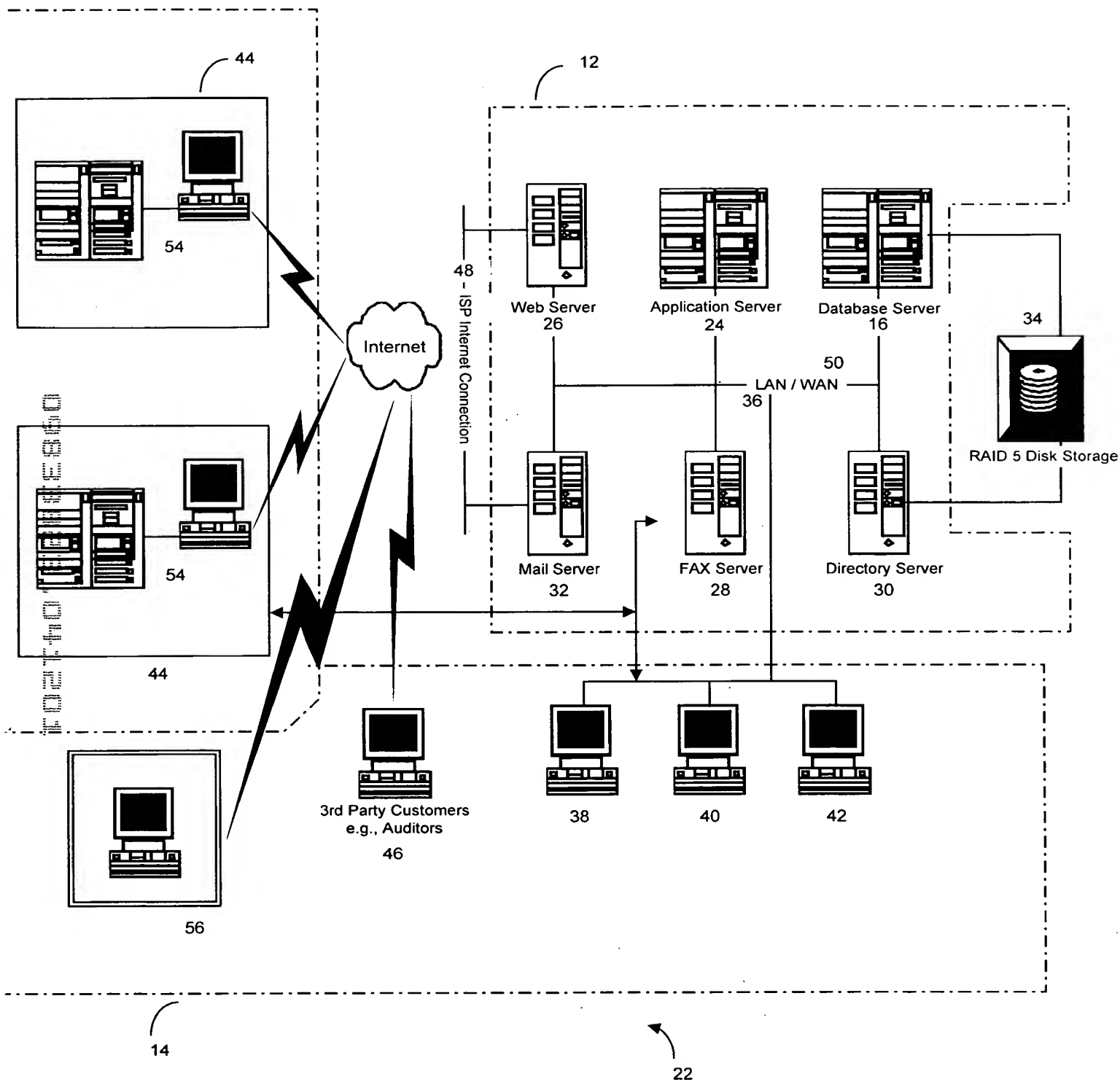
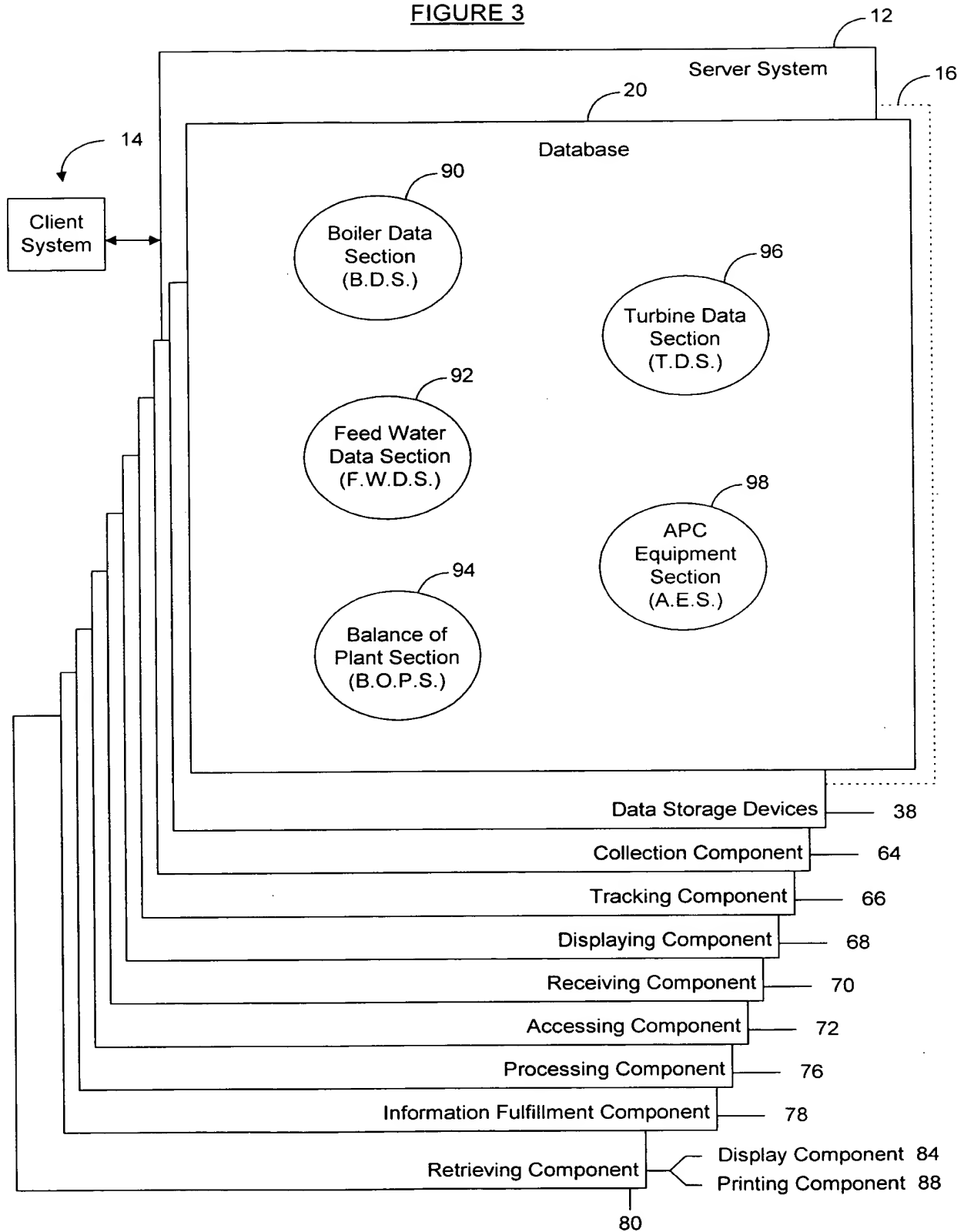


FIGURE 2

FIGURE 3



File Name: ConfPerf01001
 Project Name: Sample Project
 Location: USA
 Operator: To Be Determined

Facility Generation Information (per unit information)

Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8
375	0	0	0	0	0	0	0
Unit Gross Output (Input 0 (TNA))							
House Load							
Typical							

Type of Unit

PAVISED CAL

Existing Operational Hours From CO

148,920

Dispatch Information

Unit 1

Percentages of Available Hours Dispatched

Month	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
January	100.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%
February	100.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%
March	100.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%
April	100.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%
May	100.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%
June	100.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%
July	100.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%
August	100.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%
September	100.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%
October	100.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%
November	100.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%
December	100.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%

Dispatched Load

Month	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
January	95.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%
February	95.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%
March	95.00%	97.00%	97.00%	97.00%	97.00%	97.00%	97.00%	97.00%	97.00%	97.00%
April	95.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%
May	95.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%
June	95.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%
July	95.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
August	95.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
September	95.00%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%
October	95.00%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%
November	95.00%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%
December	95.00%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%

FIGURE - 4

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Unit 4

Percentage of Available Hours Dispatched

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Dispatched Load	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%
January	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%
February	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%
March	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%
April	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%
May	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%
June	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%
July	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%
August	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%
September	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%
October	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%
November	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%
December	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%

Unit 5

Percentage of Available Hours Dispatched

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Dispatched Load	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%
January	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%
February	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%
March	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%
April	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%
May	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%
June	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%
July	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%
August	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%
September	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%
October	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%
November	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%
December	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%

FIGURE 6

[illegible]

3/17/2007

Unit 8

Percentage of Available Hours Dispatched

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
January	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%
February	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%
March	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%
April	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%
May	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%
June	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%
July	96.00%	96.00%	96.00%	96.00%	96.00%	96.00%	96.00%	96.00%	96.00%	96.00%
August	96.00%	96.00%	96.00%	96.00%	96.00%	96.00%	96.00%	96.00%	96.00%	96.00%
September	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%
October	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%
November	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%
December	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%

Dispatched Load

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
January	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%
February	97.00%	97.00%	97.00%	97.00%	97.00%	97.00%	97.00%	97.00%	97.00%	97.00%
March	97.00%	97.00%	97.00%	97.00%	97.00%	97.00%	97.00%	97.00%	97.00%	97.00%
April	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%
May	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%
June	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%
July	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
August	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
September	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%
October	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%
November	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%
December	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%

FIGURE - 8

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Exits Information:

ACTUAL ANALYSIS

Mediators & Ash Free	
Fixed Carbon	34.00%
Volatile Matter	32.00%
Moisture	2.00%
Ash	32.00%
Excess Air	20.00%
NOx	0.00%

Ash Mineral Analysis	
Alumina - Al ₂ O ₃	81.00%
Silica - SiO ₂	14.00%
Titania - TiO ₂	1.00%
Ferric Oxide - Fe ₂ O ₃	0.00%
Lime - CaO	24.00%
Magnesia - MgO	0.00%
Potassium Oxide - K ₂ O	0.00%
Sodium Oxide - Na ₂ O	1.00%
Sulfur Trioxide - SO ₃	0.00%
Phosphorus Pentoxide - P ₂ O ₅	0.00%
Undetermined	0.00%

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Operational Information:

Cycle ACTUAL CYCLE VALUES

Unit	Reactant Pressure (psi)	Outlet Pressure (psi)	Outlet Temperature (F)
Unit 1	2,400	2,400	1,000
Unit 2			
Unit 3			
Unit 4			
Unit 5			
Unit 6			
Unit 7			
Unit 8			

Reactant Pressure (psi) 2,400

Outlet Pressure (psi) 2,400

Outlet Temperature (F) 1,000

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Exhaust Temperature (F)

Unit 1	480
Unit 2	0
Unit 3	0
Unit 4	0
Unit 5	0
Unit 6	0
Unit 7	0
Unit 8	0

Blank Temperature (F)

Unit 1	275
Unit 2	0
Unit 3	0
Unit 4	0
Unit 5	0
Unit 6	0
Unit 7	0
Unit 8	0

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FIGURE-9

Facility Equipment Information:

Flyash Control Equipment

Unit 1	BAKED	▼
Unit 2	CP	▼
Unit 3	BAKED PLUS SORTED MAG	▼
Unit 4	CP	▼
Unit 5	CP	▼
Unit 6	CP	▼
Unit 7	CP	▼
Unit 8	CP	▼

SO₂ Control Equipment

Unit 1	Scrubber	▼	Low	▼
Unit 2	NO SO ₂ EQUIPMENT	▼	Low	▼
Unit 3	LOW REACTION	▼	Low	▼
Unit 4	NO SO ₂ EQUIPMENT	▼	Low	▼
Unit 5	NO SO ₂ EQUIPMENT	▼	Low	▼
Unit 6	NO SO ₂ EQUIPMENT	▼	Low	▼
Unit 7	NO SO ₂ EQUIPMENT	▼	Low	▼
Unit 8	NO SO ₂ EQUIPMENT	▼	Low	▼

Mercury Control Equipment

Unit 1	ACTIVATED CARBON	▼
Unit 2	NO Hg CONTROL	▼
Unit 3	NO Hg CONTROL	▼
Unit 4	NO Hg CONTROL	▼
Unit 5	NO Hg CONTROL	▼
Unit 6	NO Hg CONTROL	▼
Unit 7	NO Hg CONTROL	▼
Unit 8	NO Hg CONTROL	▼

NO_x Control Equipment

Unit 1	SCR	▼
Unit 2	LOW NO _x BURNERS	▼
Unit 3	SCR	▼
Unit 4	LOW NO _x BURNERS	▼
Unit 5	LOW NO _x BURNERS	▼
Unit 6	LOW NO _x BURNERS	▼
Unit 7	LOW NO _x BURNERS	▼
Unit 8	LOW NO _x BURNERS	▼

Facility Information:

Coal Pricing	\$15.00
FOB Mine	\$15.00
Transportation	\$30.00

FIGURE-10

FIGURE - 11

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STEAM CONDITIONS:

	Without QF Steam	With Equiv. QF Steam
Superheater Flow:	2,568,331	2,568,331
Reheater Flow:	2,254,665	2,254,665

lb/hr
lb/hr

	Superheat	Reheat
Inlet Conditions:		
Steam Pressure - psia	2,470	639
Steam Quality	0	
Water/Steam Temp. - F	490	660
Enthalpy	476	1,325
Outlet Conditions:		
Steam Pressure - psia	2,415	589
Steam Temp. - Deg. F	1,000	1,000
Enthalpy	1,460	1,518
Heat Input	984	192

QF HEAT LOSS		No Loss
Pounds Per Hour		0
Pressure - psia		464.696
Temperature		460
Degrees of SH		50
QF Steam Enthalpy		1243.18
FW Enthalpy		476.14
Heat Loss - Btu/s		0
Increase in Steam - #/hr		0
Equiv. Output - MW		373

No Loss Included

Pounds Per Year 0.0000E+00

210

Reheat-To Superheat Ratio 0.877871681

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PREDICTED PERFORMANCE: AVERAGE LOAD

		100%	(MCR)	95.00%	
FUEL	Pulverized Coal				
TURBINE STEAM FLOW CORRECTION FACTOR		0.9589		0.9589	
EVAPORATION	Superheater:	2,568,331		2,439,914	
	Reheater:	2,254,665		2,141,932	
TEMP. AT SUPERHEATER/REHEATER OUTLET	F	1,000	/ 1,000	1,000	1000
PRES. AT SUPERHEATER/REHEATER OUTLET	psig	2,400	/ 574	2,400	574
FEEDWATER TEMP.	F	490		490	
GAS TEMP. LEAVING AIR HEATER	F	275		268	
	(uncorr.)				
AMBIENT AIR TEMP.	F	80		80	
AIR TEMP. LEAVING THE AIR HEATER (APPROX)	F	552		20	
EXCESS AIR	pct	20			LHV
HEAT LOSSES					
	DRY GAS	4.36%		4.20%	4.20%
	H2O & H2 IN FUEL	8.04%		8.02%	
	H2O IN AIR	0.10%		0.10%	
	CARBON	0.25%		0.24%	0.20%
	RADIATION	0.35%		0.33%	0.33%
	MFG. MARGIN	1.50%		1.43%	1.43%
	HEAT CREDITS	-0.41%		-0.39%	
	BLOWDOWN	0.00%		0.00%	
	TOTAL	14.19%		13.82%	6.15%
EFFICIENCY	pct	85.81%		86.08%	93.85%
GROSS HEAT FIRED	MMBtu/hr	3,554.99		3,366.55	
FUEL FIRED PER HOUR	lb/hr	418,234		396,065	
	TPH	209.12		198.03	
AVERAGE LOAD CONDITION DURING AVAILABLE HOURS	%	100.00%		95.00%	
AVAILABLE HOURS		8,256		8,256	
FUEL FIRED PER YEAR	tyr	1,726,472		1,634,955	
TOTAL COMBUSTION PRODUCTS	lb/hr	3,601,358		3,410,456	
	ACFM	1,109,079			
TOTAL COMBUSTION AIR	lb/hr	3,183,124		3,014,392	
	ACFM	997,176			
TOTAL ASH (100% UP)	tyr	11.50		10.89	
TOTAL LIMESTONE (100% UP)	tyr	3.10		2.93	
TOTAL FLYASH/LIMESTONE REMOVAL SYSTEM LOADING	tyr	25,586		24,230	
	tyr	14.60		13.83	
FLUE GAS TO STACK	lb/hr	3,601,358		3,410,456	
LJUNGSTROM AIR HEATER LEAKAGE	lb/hr	0		0	
SOOTBLOWING STEAM	lb/hr	0		0	
NET EVAPORATION	lb/hr	2,568,331		2,439,914	
POUNDS STM/KW		6.89			
NO. OF UNITS		1			
HEAT RATE CALCULATION (APPROX.):					
Gross Heat Rate (Total Plant):	BTU/KW HR				
Net Heat Rate (Turbine Only):	BTU/KW HR				
Plant Gross Heat Rate:	BTU/KW HR	9,543	HHV 10,068	9,513	10,036
		8,824	LHV 9,310	8,796	9,280
Plant Net Heat Rate:	BTU/KW HR	10,098	HHV 10,654	10,056	10,621
		9,338	LHV 9,852	9,308	9,820

FIGURE - 11

	2001	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Total
Total Plant Costs										
Direct Labor:										
Agreed for local labor requirements (year 1, year 2)	0									
	\$4,459,457									\$4,459,457
Operator's Fee & Service:										
Bonus Payments:	\$227,239									\$227,239
Home Office Technical Support:	\$0									\$0
Percent of Annual Labor:	\$0									\$0
Warranty Support:	\$0									\$0
Percent of Annual Labor:	\$0									\$0
Planned Maintenance:	\$4,100,224									\$4,100,224
Boiler:										
Turbine: (Major Turbine Outage assumed in 1999)										
APC Equipment:										
Feedwater System:										
BCP:										
Unplanned Maintenance:										
10% of Planned Maintenance:	\$410,022									\$410,022
Planned Spare Parts:										
Boiler:	\$1,731,891									\$1,731,891
Turbine:	\$798,200									\$798,200
JAC Equipment:	\$149,151									\$149,151
Feedwater System:	\$62,891									\$62,891
BCP:	\$173,821									\$173,821
	\$2,866,234									\$2,866,234
Unplanned Spare Parts:	\$286,828									\$286,828
10% of Planned Spare:										
Employee Travel & Relocation:	\$98,200									\$98,200
Other Employee Expenses, Fees and Services:	\$289,422									\$289,422
Office/Administration expenses:	\$281,873									\$281,873
Contract Services:	Included									
Percent of Annual Labor:										
Air Disposal:	\$1,129,890	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,129,890
Start-up Fuel:	\$44,716	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$44,716
Consumables:	\$279,877									\$279,877
Chemicals:	\$459,893									\$459,893
Coal:	\$48,519,048	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$48,519,048
Lubricants:	\$399,453	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$399,453
Purchased Power:	\$212,706	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$212,706
Equipment Rental:	\$1,119,353									\$1,119,353
Total Operating Budget										
Taxes:	\$0									\$0
Insurance:	\$0									\$0
Not Included: Building Data Base	\$0									\$0
Total Operations Costs including Taxes and Insurance:										
	\$2,851,796,823	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,851,796,823
Cost of Generation:										
Costs (W) generated Annually										
	\$0									\$0

O&M Cost Summary For:				
2001				
	Fixed Costs	Variable Costs	Major Maintenance	Fuel
Direct Labor:				
Operator's Fee & Service:	\$4,429,453			
Bonus Payments:	\$27,529			
Home Office Technical Support:	\$0			
Warranty Support:	\$0			
Planned Maintenance:			\$4,102,254	
Power Marketing & Resource Management	\$0			
Unplanned Maintenance:			\$410,223	
Planned Spare Parts:				
Boiler:		\$1,751,881		
Turbine:		\$719,220		
APC Equipment:		\$14,101		
Feedwater System:		\$40,000		
SDP:		\$173,851		
		\$2,698,053		
Unplanned Spare Parts:		\$298,529		
Employee Travel & Relocation:	\$88,200			
Other Employee Expenses, Fees and Services	\$296,425			
Office/Administration Expenses:	\$294,873			
Contract Services:	Included			
Ash Disposal:		\$1,125,860		
Start-up Fuel:		\$94,716		
Consumables:		\$279,377		
Chemicals:		\$428,048		
Oil:		\$582,429		\$48,810,209
Lubricants:		\$512,700		
Purchased Power:		\$1,415,253		
Equipment Rental:				
Total Operating Budget	\$6,823,008	\$7,215,116	\$4,915,287	\$48,810,209
	\$1,000	\$0.00%	\$4.17%	\$0.84%
Fixed Costs	\$6,823,008	Variable Costs	Maintenance	Fuel
	\$0.00%	\$0.00%	\$0.00%	\$0.00%
	\$0.00%	\$0.00%	\$0.00%	\$0.00%
	\$0.00%	\$0.00%	\$0.00%	\$0.00%

FIGURE - 13

File Name: CoalPerf031701
Project Name: Sample Project
Location: USA

FIGURE 14

Operator: To Be Determined

Facility Generation Information (per unit information):

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Total	MW
Facility Net Output:	1	0	0	0	0	0	0	0	352.0	MW
House Load (-5.5%):	352.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	352.0	MW
House Load in MW	5.50%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	MW
	20.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	MW
Live Losses:	0	0	0	0	0	0	0	0	0	MW
Unit Gross Output:	373	0	0	0	0	0	0	0	373	MW
OSM Costs Calculated:	1	1	1	1	1	1	1	1	1	MW
Eqm. Increased MW Output:	373	0	0	0	0	0	0	0	373	MW
Gross Output Used in OSM Calculations:	10,088	0	0	0	0	0	0	0	10,088	MW
Unit Net Heat Rate (HHV)	10,654	0	0	0	0	0	0	0	10,654	MW

2801

Operational Information For

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Total	MW
Base O&M Labor Costs On	1	0	0	0	0	0	0	0	1	MW
Gross Maximum Capacity	373	0	0	0	0	0	0	0	373	MW
Net Maximum Capacity	352	0	0	0	0	0	0	0	352	MW
Gross Generation (Actual)	89.63%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	89.63%	MW
Net Generation (Actual)	84.25%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	84.25%	MW
Gross Generation (Actual)	2,921,786	0	0	0	0	0	0	0	2,921,786	MW
Net Generation (Actual)	2,761,097	0	0	0	0	0	0	0	2,761,097	MW
Period Hours Available	8,760	0	0	0	0	0	0	0	8,760	MW
Excessed Output Hours	8,256	0	0	0	0	0	0	0	8,256	MW
Excessed Output Hours	0	0	0	0	0	0	0	0	0	MW
Maintenance Output Hours	0	0	0	0	0	0	0	0	0	MW
Average Load Condition (Gross)	354	0	0	0	0	0	0	0	354	MW
Average Load Condition (Net)	334	0	0	0	0	0	0	0	334	MW
Average Load Condition (Net)	95.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	95.00%	MW

DE Steam Exp

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Total	MW
DE Steam Flow (% of MCR)	0%	0%	0%	0%	0%	0%	0%	0%	0%	MW
Pounds Per Hour (Average)	0	0	0	0	0	0	0	0	0	MW
Pounds Per Hour (Average)	0	0	0	0	0	0	0	0	0	MW
Pressure (psig)	450	450	450	450	450	450	450	450	450	MW
Degrees of SH (F)	50	50	50	50	50	50	50	50	50	MW

Coal Per Unit Information
Exhaustion Data

17-Mar-01

Exhaustion Rate		Cost per day/working year (\$/work)			
Last Blade/Turbine Overhaul	0.0%	17,000			
Cost of Purchased Electricity	10.000	60,000			
Location Adjustment factor			Cost Component	Units	\$/yr
			Maintenance	(80)	5,600
			Labor	(80)	5,600

Coal Pricing - Tonne Basis		
69.55	84.76	97.06
	121.87%	114.51%
6.66	7.55	8.61
	113.36%	114.04%

Ash - Tonne Bais

51-32091F

250

[illegible]

Operator Related Information	
Operator Fee	\$0
Operator Bonus	\$0
Home Office Tech Support	\$0
Warranty Support	\$0
Number of shifts	4
Union-non-union Facility	0
Overtime	10%
	40%

Facility Equipment Information:		Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8
Type Of Boiler Equipment (1 or 2)	1	1	1	1	1	1	1	1	1
	2								
Unit Design / Commercial Operation Date		PC	PC	PC	PC	PC	PC	PC	PC
Number of Boilers		1	1	1	1	1	1	1	1
Flyash Control System		2	1	3	1	1	1	1	1
SO2 Control System:		3	1	2	1	1	1	1	1
NOx Control System									
Misoxy Control System		2	1	1	1	1	1	1	1
NOx Control System									

General Information

3/17/2001
5:06 PM

1 LOW NOX BURNERS									
2 SNCR									
3 SCR									
1 ACTUAL CYCLE VALUES									
2 STANDARD 1800 PSIG (NON-REHEAT)									
3 STANDARD 2400 PSIG (5% OF)									
Cooling Tower: (Year: No-0)									
Cycle:									
Superheater:									
(-1,080,000 @ 800 MW)									
(Input Actual Flow Value if Available)									
Flow without OF heat loss									
Equip. OF Steam Increase									
Total Steam Flow									
Outlet Pressure									
Outlet Temperature									
Reheater:									
(-3,770,000 @ 800 MW)									
Flow without OF heat loss									
Equip. OF Steam Increase									
Total Steam Flow									
Inlet Pressure (psig)									
Inlet Temperature (F)									
Outlet Pressure (psig)									
Outlet Temperature (F)									
Feedwater Temperature									
Stack Temperature									
Ambient Temperature									
Spares Cost									
Fuel Loss during Handling:									

254

FIGURE-16

Fuel Information:									
Actual Analysis:									
STANDARD BITUMINOUS									
STANDARD SUBBITUMINOUS									
STANDARD LIGNITE (TEXAS)									
STANDARD NATURAL GAS									
Selected Fuel Input:									
Ultimate Analysis:									
Mixture									
Ash									
Carbon									
Hydrogen									
Nitrogen									
Chlorine									
Sulfur									
Oxygen									
Sub:									
Biomass									
28.80%									
5.50%									
48.30%									
3.40%									
0.70%									
0.01%									
0.85%									
11.80%									
100.38%									
Excess Air:									
20.00%									
HHV:									
8,500									
LHV:									
18.28									
Proximate:									
Fixed Carbon (different)									
33.71%									
Volatile Matter									
30.44%									
Sulfur									
0.85%									
General Information:									
Excess Air:									
10.00%									
HHV:									
0									
LHV:									
0									
Note 1: (88F, 30" WG)									

FOOTING E28E350

Moisture
Ash

28.55%
5.45%
100.00%

✓ 258

Furnace Volume Design Parameters

Volume - Cu. Ft.
Surface - Sq. Ft. (EPRS - Up Nose)
NAPAL

20.000
200.000
1,860.000
0.25%

Carbon Loss

FIGURE-17

FIGURE - 18

270

File Name: CoalPerf031601
Project Name: Sample Project

Location: USA

Operator: To Be Determined

Escalation 4.00%
Escalation Factor 1.070

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Total Facility
Number of Equipment Sets Per Unit	1	0	0	0	0	0	0	0	1
Unit Gross Output	373	0	0	0	0	0	0	0	373
Development Costs									
Internal Costs	\$11,833	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$11,832.68
Third Party Costs	\$12,326	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$12,325.70
Project Control	\$1,576	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,577.69
Development Contingency	\$0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Land Options	\$866	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$868.06
Pre NTP EPC Cost	\$1,872	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,872.11
Total Development Costs	\$28,684	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$28,684.24
Development Fee/Mine Acquisition/Site									
Development Fee	\$9,057	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$9,057.13
Mine Acquisition Costs	\$0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Site Purchase	\$12,076	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$12,076.17
Development Fee/Mine Acquisition/Site	\$21,133	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$21,133.30
Plant									
Boilers									
Headers	\$4,307	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,307.00
Heating Surface	\$21,036	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$21,036.00
Waterwall	\$12,904	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$12,904.00
Steel	\$16,533	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$16,533.00
Firing Equipment	\$10,275	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,275.00
Misc. Equipment	\$20,846	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$20,846.00
	\$88,501	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$88,500.85
Turbine Generators	\$38,324	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$38,324.29
BAGHOUSE	\$7,459	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,459.07
SCHUMBER	\$37,253	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$37,252.80
ACTIVATED CARBON	\$419.07	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$419.07
SCR	\$37,253	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$37,252.80
Circulating Water System	\$1,275.65	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,275.65
Electrical System & Equipment	\$23,330.45	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$23,330.45
Fuel Storage & Handling	\$17,662.70	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$17,662.70
Infrastructure	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Water Treatment	\$3,132.42	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,132.42
Other	\$39,755.15	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$39,755.15
Misc. Insurance	\$515.62	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$515.62
Fixtures									
Boilers - not plant related	\$446.53	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$446.53
Chimneys	\$3,500.06	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,500.06
Cooling Towers	\$20,257.85	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$20,257.85
Coal Bunkers	\$1,002.37	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,002.37
Land & Buildings									
Buildings	\$34,773.70	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$34,773.70
Other									
EPC Target	\$49,085.88	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$49,085.88
Total EPC Costs	\$402,048.85	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$402,048.85
Transmission Fees During Construction	\$4,021.87	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$4,021.87
Waste Water Pipeline	\$11,189.05	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$11,189.05
Management Services During Construction									
General & Administrative	\$15,382.48	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$15,382.48
Professional Services	\$2,760.96	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,760.96
Engineering Consultants	\$1,972.11	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,972.11
Utilities	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Owner's Mobilization G&A	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Other Owner's Costs	\$2,218.83	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,218.83
Management Services Fee	\$1,725.80	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,725.80
Total Owner's Costs	\$24,059.78	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$24,059.78
O&M Mobilization									
Labor	\$8,806.56	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$8,806.56
Fee	\$1,015.84	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,015.84
G&A	\$374.70	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$374.70
Plant Consumables	\$1,356.81	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,356.81
Equipment	\$5,423.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,423.31
Owner's G&A	\$9,663.35	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$9,663.35
	\$24,440.39	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$24,440.39
Infrastructure Costs									
Roads	\$8,283.15	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$8,283.15
Community Infrastructure	\$1,054.09	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,054.09
Mine Industrial Area	\$5,180.74	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,180.74
Construction Camp	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Water Management	\$1,176.37	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,176.37
Total Infrastructure Costs	\$15,674.35	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$15,674.35
Owner's Contingency									
Power Plant EPC Costs	\$40,204.87	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$40,204.87
Transmission Costs	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Electrical Interconnection	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Infrastructure Costs	\$1,587.44	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,587.44
Total Owner's Contingency	\$41,772.10	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$41,772.10
Financing Fees/Costs									
Financial Advisor	\$8,409.37	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$8,409.37
Upfront Fees	\$8,381.48	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$8,381.48
	\$14,790.85	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$14,790.85

Unit Gross Output	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Total Facility
	373	0	0	0	0	0	0	0	373
Total Cost	\$587,823.73	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$587,823.73
\$/kW Installed	\$1,578.29	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1578.29

File Name: CoalPerf031601
Project Name: Sample Project

Location: USA

Operator: To Be Determined

Date	Hours of Operation (# of operational year)	Mar-01	Mar-02	Mar-03	Mar-04	Mar-05	Mar-06	Mar-07	Mar-08	Mar-09	Mar-10	10 Year Average
Operational Year		1	2	3	4	5	6	7	8	9	10	
Waterwall		\$258	\$1,280	\$258	\$258	\$258	\$258	\$258	\$1,280	\$258	\$258	\$464
Heating Surface		\$439	\$2,193	\$439	\$439	\$439	\$439	\$439	\$2,193	\$439	\$439	\$780
Grates		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$310
Pulverizers		\$0	\$1,032	\$0	\$258	\$0	\$516	\$0	\$1,032	\$0	\$258	\$310
Air Pre-Heater		\$0	\$1,032	\$0	\$258	\$0	\$516	\$0	\$1,032	\$0	\$258	\$310
Fuel Handling		\$0	\$88	\$0	\$177	\$0	\$88	\$0	\$177	\$0	\$88	\$82
Headers		\$0	\$215	\$0	\$0	\$0	\$0	\$0	\$215	\$0	\$0	\$43
Steel		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2
Belt/Crushers		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$13
Casting/Refractory/Ductwork		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$18
Chemical Cleaning		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$550	\$0	\$0	\$55
Sub-Total		\$887	\$5,861	\$887	\$2,143	\$887	\$887	\$887	\$5,488	\$887	\$887	\$2,068
Turbine (Inspection)		\$0	\$1,916	\$0	\$0	\$0	\$0	\$0	\$1,916	\$0	\$0	\$383
Turbine Valves		\$0	\$575	\$0	\$0	\$0	\$0	\$0	\$575	\$0	\$0	\$144
Generator (Inspection)		\$0	\$768	\$0	\$0	\$0	\$0	\$0	\$768	\$0	\$0	\$153
Sub-Total		\$0	\$3,267	\$0	\$0	\$0	\$0	\$0	\$3,267	\$0	\$0	\$680
Anion Resin		\$344	\$0	\$0	\$376	\$0	\$0	\$407	\$0	\$0	\$0	\$132
Cation Resin		\$0	\$141	\$0	\$0	\$0	\$125	\$0	\$0	\$0	\$0	\$27
MB Resin		\$141	\$0	\$0	\$110	\$0	\$0	\$125	\$0	\$0	\$0	\$52
Carbon Filters		\$78	\$0	\$0	\$78	\$0	\$0	\$78	\$0	\$0	\$0	\$39
Gravity Filters		\$0	\$0	\$13	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5
Sub-Total		\$564	\$141	\$13	\$486	\$78	\$125	\$811	\$0	\$116	\$0	\$264
BAGHOUSE		\$0	\$0	\$184	\$0	\$0	\$184	\$0	\$0	\$184	\$0	\$49
SCRUBBER		\$0	\$0	\$310	\$0	\$0	\$310	\$0	\$0	\$310	\$0	\$93
Sub-Total		\$0	\$0	\$474	\$0	\$0	\$474	\$0	\$0	\$474	\$0	\$142
Electrical		\$0	\$233	\$0	\$233	\$0	\$233	\$0	\$233	\$0	\$233	\$117
I&C		\$0	\$117	\$0	\$117	\$0	\$117	\$0	\$117	\$0	\$117	\$58
Power Block		\$0	\$1,916	\$0	\$0	\$0	\$0	\$0	\$1,916	\$0	\$0	\$479
Ash Handling		\$413	\$0	\$208	\$0	\$208	\$0	\$413	\$0	\$413	\$0	\$165
General		\$122	\$0	\$139	\$0	\$146	\$0	\$156	\$0	\$122	\$0	\$68
Facilities/Infrastructure		\$0	\$122	\$0	\$139	\$0	\$156	\$0	\$170	\$0	\$122	\$71
Sub-Total		\$635	\$2,387	\$346	\$489	\$1,310	\$608	\$669	\$2,436	\$635	\$472	\$968
Total:		\$1,795	\$11,636	\$1,607	\$2,364	\$2,373	\$3,246	\$1,877	\$12,182	\$1,821	\$2,101	\$4,100

FIGURE - 19
300

General Project Information:

File Name: CoalPerf031601
Project Name: Sample Project

Location: USA

Operator: To Be Determined

Operator's Fees & Services:

Operator Fee	\$0
Legal Services	\$139,805
Construction Services	\$146,709
Testing Services	<u>\$41,424</u>
Total Fees & Services	\$327,939

Travel: \$86,300

Misc. Employee Expenses \$286,422

FIGURE- 20

↑
310

File Name: CoalPerf031601
Project Name: Sample Project

Location: USA

Operator: To Be Determined

Sample Project

Consumables:

Lubricating Oils:		\$379,977
Hydraulic Oil:		
Solvents/Boiler Wash:		
Cleaning Materials:		
Welding Supplies:		
Nuts/Bolts/Small Mechanical Parts:		
Fuses/Light Bulb/small Elect. Parts:		
Fittings/Small I&E Parts:		
Gas & Oil:		
Total Oils and Lubricants		\$379,977

Chemicals:

Boiler Water:	62.27%	\$285,603
Cooling Water:	38.38%	\$166,889
Demin. Regen.	1.35%	\$6,194
Fuel Oil:		
Sanitary:		
NOx		
Aqueous Ammonia:		
Total Chemicals:		\$458,686

Gases:

Nitrogen:	\$0
Hydrogen:	\$0
Oxygen/Acetylene	\$0
NOx, CO, SO2, O2 Span Gas	\$0
Total Gases:	\$0

Office Supplies & Services:

Postage, Overnight Mail, etc:	\$17,104
Freight:	\$0
Telephone	\$41,038
Utilities	\$9,263
Dues, Subscriptions	\$70,914
Advertising:	\$0
Camera/ Film/Photo Supplies:	\$0
Copier/Paper/Service:	\$0
Office Supplies:	\$40,194
General Supplies:	\$0
Audio Visual Equipment:	\$0
Portable Radios/Service:	\$0
Drinking Water:	\$0
Safety Supplies:	\$0
Safety/Environmental Insp:	\$0
Instrument Service/Repair:	\$0
Vehicles/Service/Fuel:	\$165,284
Insurance Autos/Trucks	\$0
Lift Trucks/Service:	\$0
Small Tools:	\$0
Software for Computers:	\$271
Computer Hardware:	\$0
Building Maintenance:	\$4,594
Janitorial Supplies:	\$0
Misc. Expenses:	\$13,310
Uniforms:	\$0
Total Supplies and Services:	\$361,973

Office Furniture/Rent:

Office Rent:	\$0
Desk/Chairs/etc:	\$0
Lab/Shop/Cntrl. Rm. Equip:	\$0
Computer Lease:	\$0
Total Office Furniture:	\$0

FIGURE - 21

Direct Mat'l

320

File Name: CoalPerf031601
Project Name: Sample Project

Location: USA

Operator: To Be Determined

Rentals/Lease:

Tools:	\$15,304
Equipment:	\$261,694
Office:	\$57,431
Office Equipment	\$1,066,871
Railcar:	\$17,253
Lease Auto/Tucks	\$1,418,553
Total Rentals:	

Planned Spare Parts:

Boiler:	\$1,731,661
Turbine:	\$766,330
APC Equipment:	\$149,151
Feedwater System:	\$62,661
BOP:	\$176,591
Total Spare Parts:	\$2,886,394

FIGURE - 22

↑
340

File Name: CoalPerf031801
Project Name: Sample Project

Location: USA

Operator: To Be Determined

Proximate Analysis:

FC	33.71%
VM	30.44%
S	0.85%
M	28.35%
A	5.45%
Total	100.00%

HHV (Btu/lb) 8,500

Information used in conjunction with the coal classification figure:

BTU:	8504.88
DRY:	33.70%

Proxied Coal Classification:

Coal Type:	3
Sub:	Sub-
(Calculated)	Bluminous
Hardgrove Grind Index	OK

Ash Mineral Analysis:

Silica - SiO2	31.00
Alumina - Al2O3	14.00
Titanium - TiO2	1.10
Ferric Oxide - Fe2O3	8.50
Lime - CaO	24.80
Magnesia - MgO	6.00
Potassium Oxide - K2O	0.25
Sodium Oxide - Na2O	1.30
Sulfur Trioxide - SO3	12.20
Phosphorus Pentoxide - P2O5	0.70
Undetermined	2.35
Total	100.00

Ash Fusion Temperatures (Deg. F)
Initial Deformation-Reducing (Input Data) 2188
Initial Deformation-Softening (Input Data) 2239

PAHR Formula Balances/Analysis:

BASE/ACID RATIO: (A range of 4-7 coals and results in low ash-fusibility temps)	0.7641
IRON/CALCIUM RATIO: (CA:3 indicative lowers the fusibility temp. of the ash.)	0.28
IRON/DOLOMITE RATIO: (Bt. type ash is	0.21
SILICA/ALUMINA RATIO: (above 2.8 & 6	2.21

FIGURE - 23

Project Natural Gas Analysis:

Natural Gas Analysis:	Molecular Weight	Percent by vol
O ₂	32.00	0.00%
A	0.00	0.00%
CO ₂	44.00	0.00%
N ₂	28.08	0.00%
H ₂	2.02	0.00%
H ₂ S	34.08	0.00%
CH ₄	16.03	0.00%
C ₂ H ₆	30.05	0.00%
C ₃ H ₈	44.09	0.00%
CAH ₁₀	58.10	0.00%
CSH ₁₂	72.10	0.00%
CSH ₁₄	86.12	0.00%
Total:	0	0.00%

Flux Gas Weight	Molecular Weight of Fuel:
Gas/Cu. Ft. (Gas)	0
GH to GT (MMBTU)	372.8
GH to Dist Burners	22.26
Total GH:	405.06
HHV of Fuel (BTU/Cu. Ft.)	0
Cu. Ft. of Gas Fired / Hr	#DIV/0!
Lbs. of Gas Fired / Hr	#DIV/0!
Lbs. of Air / Hr	#DIV/0!
Total Gas Flow @ 0%EA	#DIV/0!

Natural Gas Heating Value Conversion Analysis:	HHV	HHV
17-Mar-01	Comp. Btu	Comp. Btu
	(68F, 14.7psia)	(68F, 14.7psia)
Natural Gas Analysis:	0	0
Oxygen	0.00%	0.00%
Argon	0.00%	0.00%
Carbon Dioxide	0.00%	0.00%
Nitrogen	0.00%	0.00%
Hydrogen	318.4	0.00%
Hydrogen Sulfide	647	0.00%
Methane	694.7	0.00%
Ethane	1742.6	0.00%
Propane	2480.1	0.00%
Butane	3215.6	0.00%
Pentane	3860.2	0.00%
Hexane	4581.238	0.00%
Total	HHV =	HHV =

Natural Gas Analysis:	HHV	HHV
Percent by vol.	Comp. Btu	Comp. Btu
	(68F, 14.7psia)	(68F, 14.7psia)
Oxygen	0	0
Argon	0.00%	0.00%
Carbon Dioxide	0	0.00%
Nitrogen	0	0.00%
Hydrogen	270	0.00%
Hydrogen Sulfide	585	0.00%
Methane	888	0.00%
Ethane	1564.5	0.00%
Propane	2282.6	0.00%
Butane	2868.7	0.00%
Pentane	3554	0.00%
Hexane	4311.72	0.00%
Total	HHV =	HHV =

HHV/LHV Ratio	#DIV/0!
HHV/LHV Ratio	#DIV/0!

Notes:
(1) Source Murk's standard Handbook for Mechanical Engineers
Ninth Edition Page 4-20

FIGURE 24

O & M Labor, Purchased Power And Fuel Calculations

GENERAL PROJECT INFORMATION:

File Name: C:\P\PORT1601
Project Name: Sample Project
Location: USA
Operator: To Be Determined

BASE INDEX

ANNUAL INFLATION RATE (to present day) 4.0%
BASE DATE 22-Aug-83
ESCALATION DATE 7-87
Put Year Esc. Factor 1.20

BASE INDEX

Being Updated	To Code To Be Used In Location	PROJECT ADJUSTMENT	PROJECT ADJUSTMENT
COMPOST ADJUSTMENT	0.7	147	147.44%
MATERIAL	0.7	154	155.03%
LABOR	0.7	154	155.03%

Number of Units
373
Total Installed MW
1.0
Average Unit Size
1.0
Multiple Unit Labor Multiplier

CAPACITY (MW)

SYSTEM: POWER BLOCK

NUMBER OF SHEETS
4 Conditions and Maintenance
1 Administration

LABOR SUMMARY (ADJUSTED FOR LOCATION)

ADMINISTRATIVE:
PLANT MANAGER
OPERATIONS MANAGER
MAINTENANCE MANAGER
PLANT/RESEARCH MANAGER
OFFICE MANAGER
ACCOUNTANT
ACCOUNT CLERK
SECRETARY
PLANT/RESEARCH ENGINEER
STOCK CLERK

SUB-TOTAL

OPERATIONS:
SHIFT SUPERVISOR
CONTROL ROOM OPERATOR
CHEMIST
APC EQUIP. OPERATOR
ROVER
BREEPER OPERATOR
FRONT-END LOADER

MAINTENANCE:
MECHANICS
MECHANICS HELPERS
TRUCK DRIVERS
ASH/NOX BLUDDGE MOVER
APC MECHANICS
ELECTRICIANS
ELECTRICIANS HELPERS
INSTRUMENT TECHS
APC AC

SUB-TOTAL 80

Exchange Rate 1

ANNUAL	Wage with Fringes per O.T. per Employee	ANNUAL LABOR COST
141,321	\$141,321	\$141,321
12,478	\$12,478	\$12,478
11,357	\$11,357	\$11,357
11,357	\$11,357	\$11,357
94,069	\$94,069	\$94,069
120,715	\$120,715	\$120,715
94,847	\$94,847	\$94,847
129,337	\$129,337	\$129,337
0	\$0	\$0
120,743	\$120,743	\$120,743
320,328	\$320,328	\$320,328
1,420,192	\$1,420,192	\$1,420,192

22

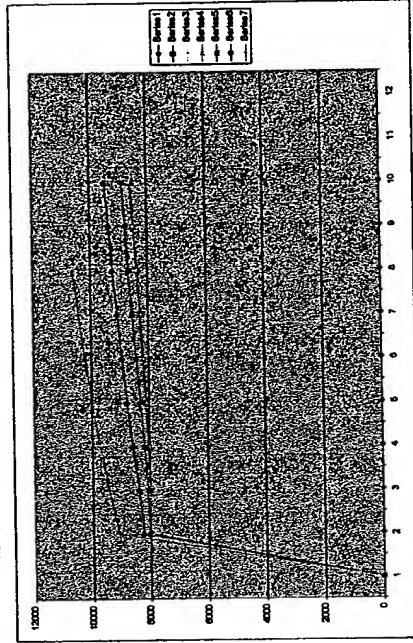
ANNUAL	Wage with Fringes per Employee	ANNUAL LABOR COST
455,897	\$455,897	\$455,897
414,542	\$414,542	\$414,542
373,028	\$373,028	\$373,028
820,065	\$820,065	\$820,065
275,919	\$275,919	\$275,919
224,185	\$224,185	\$224,185
413,879	\$413,879	\$413,879
310,409	\$310,409	\$310,409
241,429	\$241,429	\$241,429
482,859	\$482,859	\$482,859
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413,879	\$413,879	\$413,879
310,409	\$310,409	\$310,409
241,429	\$241,429	\$

FIGURE 28

This tab is being used to adjust variations in heat rate at partial loads in the performance section of the model

Flow Rates
Superheater Reheat Gen. kW
1,025,000 900,000 150,200
Boiler Feedwater Temperature - F 480
Number of Feedwater Heaters 6

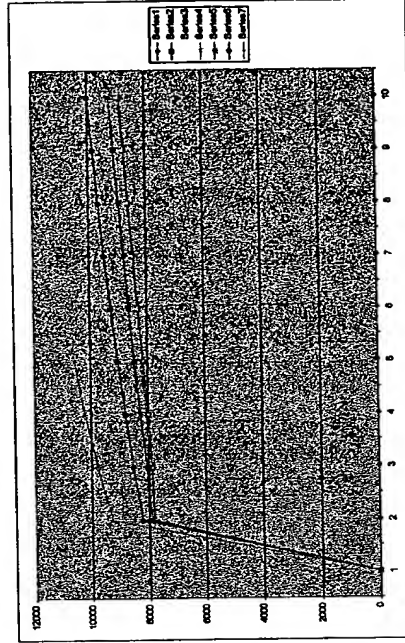
Exhaust Pressure	% Change	TC2F	Length	20	30	40	50	60	70	80	90	100
0.5	-3.12%	7748	1.0	7863	8000	8016	8227	8087				
1	-1.22%	7807	1.5	7886	8017	8009	8073	8385	8414			
1.5	0.00%	7895	2.0	8032	8091	8059	8177	8364	8715			
2	0.83%	8006	2.5	8066	8122	8138	8302	8757	8986			
2.5	1.68%	8126	3.0	8161	8228	8230	8427	8917	10184			
3	2.33%	8181	3.5	8275	8328	8330	8543	9062	10395			
3.5	2.89%	8228	4.0	8376	8433	8453	8683	9202	10575			
4	3.59%	8284	4.5	8376	8532	8534	8787	9334				
4.5	3.90%	8306	5.0	8506	8606	8657	8957	9400				
5	4.20%	8331										



TC2F
Last Stage Bucket Length

30

Flow Rates	Superheater	Reheater	Gen. kW	Boiler Feedwater Temperature - F.	Number of Feedwater Heaters
	1,025,000	900,000	150,200		
1.0	7652	7844	7907	8225	8263
1.5	7684	7916	8068	8331	8790
2.0	7695	8040	8050	8279	8797
				10288	
				8915	10558



Heat Rates

Load	25%	50%	75%	100%	0.22%	0.20%	0.33%	0.35%	0.44%	0.50%	0.55%	0.61%	0.67%	0.72%	0.78%	0.83%	0.89%	0.94%	1.00%	1.05%	1.11%	1.17%
Test Heat Rates	13,453	12,416	11,837	11,371	11,036	10,782	10,544	10,277	10,301	10,186	10,141	10,045	9,941	9,822	9,710	9,603	9,491	9,374	9,251	9,123	8,990	8,852
calc. uncorrected	9,742	9,773	9,825	9,838	9,868	9,900	9,932	9,964	9,997	10,030	10,063	10,096	10,130	10,163	10,197	10,231	10,265	10,300	10,334	10,368	10,402	10,436
Steam correction factor	1,129,129	1,118,047	1,106,835	1,095,478	1,083,982	1,072,448	1,060,875	1,049,265	1,037,617	1,025,932	1,014,209	1,002,448	990,649	978,812	966,937	955,023	943,070	931,078	919,047	906,977	894,867	882,717
Check	25%	50%	75%	100%	25%	50%	75%	100%	25%	50%	75%	100%	25%	50%	75%	100%	25%	50%	75%	100%	25%	50%
350 MW Tandem Compound	9,650	9,650	9,650	9,650	9,650	9,650	9,650	9,650	9,650	9,650	9,650	9,650	9,650	9,650	9,650	9,650	9,650	9,650	9,650	9,650	9,650	9,650
350 MW Tandem Compound	10,143	10,143	10,143	10,143	10,143	10,143	10,143	10,143	10,143	10,143	10,143	10,143	10,143	10,143	10,143	10,143	10,143	10,143	10,143	10,143	10,143	10,143
400 MW Tandem Compound	10,225	10,225	10,225	10,225	10,225	10,225	10,225	10,225	10,225	10,225	10,225	10,225	10,225	10,225	10,225	10,225	10,225	10,225	10,225	10,225	10,225	10,225
600 MW Tandem Compound	9,984	9,984	9,984	9,984	9,984	9,984	9,984	9,984	9,984	9,984	9,984	9,984	9,984	9,984	9,984	9,984	9,984	9,984	9,984	9,984	9,984	9,984

FOOTING E28E860

-0.0617523
0.0044444
1.17

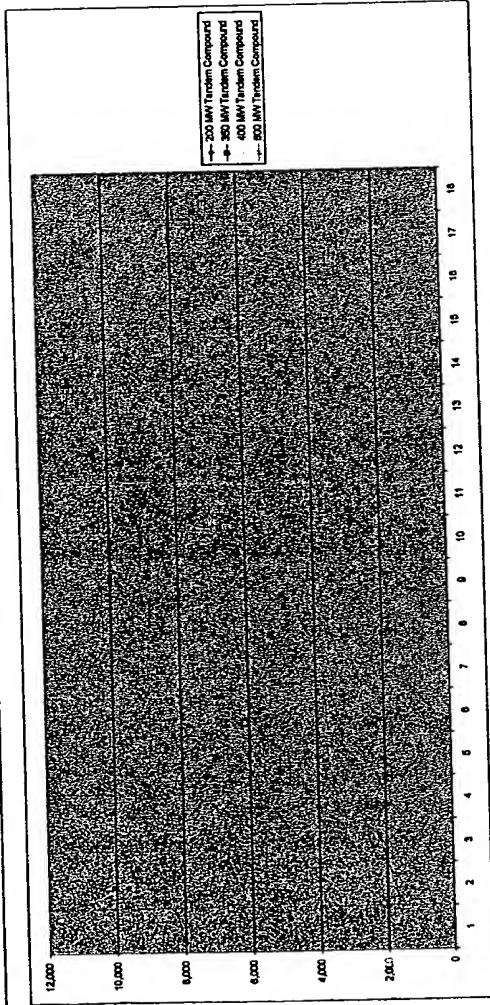
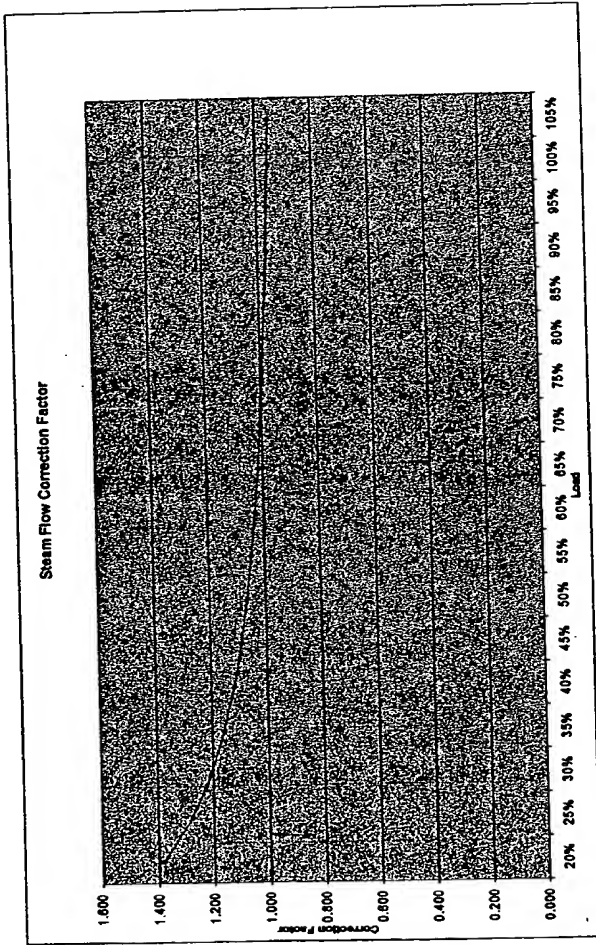


FIGURE 29

FIGURE-30

File Name: CoalPerf031601
Project Name: Sample Project

Location: USA

Operator: To Be Determined

IE Dispatch Information: For Reference Only																						
Average Annual Capacity:		373	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Capacity Factor	83.70%	85.00%	71.30%	69.80%	69.80%	69.80%	69.80%	69.80%	69.80%	69.80%	69.80%	69.80%	69.80%	69.80%	69.80%	69.80%	69.80%	69.80%	69.80%	69.80%	69.80%	69.80%
Calculated Capacity Factor	89.53%	89.53%	89.53%	89.53%	89.53%	89.53%	89.53%	89.53%	89.53%	89.53%	89.53%	89.53%	89.53%	89.53%	89.53%	89.53%	89.53%	89.53%	89.53%	89.53%	89.53%	89.53%
Availability	90.00%	90.00%	90.00%	90.00%	90.00%	90.00%	90.00%	90.00%	90.00%	90.00%	90.00%	90.00%	90.00%	90.00%	90.00%	90.00%	90.00%	90.00%	90.00%	90.00%	90.00%	90.00%
Average Load	83.00%	84.44%	79.22%	77.33%	75.00%	75.00%	75.00%	75.00%	75.00%	75.00%	75.00%	75.00%	75.00%	75.00%	75.00%	75.00%	75.00%	75.00%	75.00%	75.00%	75.00%	75.00%
Hours in Year	8,760	8,760	8,760	8,760	8,760	8,760	8,760	8,760	8,760	8,760	8,760	8,760	8,760	8,760	8,760	8,760	8,760	8,760	8,760	8,760	8,760	8,760
Hours Dispatched	7,864	7,864	7,936	7,966	7,884	7,884	7,884	7,884	7,884	7,884	7,884	7,884	7,884	7,884	7,884	7,884	7,884	7,884	7,884	7,884	7,884	7,884
Annual Output	2,731,405	2,731,405	2,721,716	2,721,716	2,721,716	2,721,716	2,721,716	2,721,716	2,721,716	2,721,716	2,721,716	2,721,716	2,721,716	2,721,716	2,721,716	2,721,716	2,721,716	2,721,716	2,721,716	2,721,716	2,721,716	2,721,716
Calculated Annual Output	2,731,405	2,731,405	2,731,405	2,731,405	2,731,405	2,731,405	2,731,405	2,731,405	2,731,405	2,731,405	2,731,405	2,731,405	2,731,405	2,731,405	2,731,405	2,731,405	2,731,405	2,731,405	2,731,405	2,731,405	2,731,405	2,731,405

Major Outages																						
Hours Available for Dispatched		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Hours Available for Dispatched	January	744	744	744	744	744	744	744	744	744	744	744	744	744	744	744	744	744	744	744	744	744
	February	672	672	672	698	672	672	672	698	672	672	672	698	672	672	672	672	672	672	672	672	698
	March	240	240	240	240	240	240	240	240	240	240	240	240	240	240	240	240	240	240	240	240	240
	April	720	720	720	720	720	720	720	720	720	720	720	720	720	720	720	720	720	720	720	720	720
	May	744	744	744	744	744	744	744	744	744	744	744	744	744	744	744	744	744	744	744	744	744
	June	720	720	720	744	744	720	720	720	720	720	720	720	720	720	720	720	720	720	720	720	720
	July	744	744	744	744	744	744	744	744	744	744	744	744	744	744	744	744	744	744	744	744	744
	August	744	744	744	744	744	744	744	744	744	744	744	744	744	744	744	744	744	744	744	744	744
	September	720	720	720	720	720	720	720	720	720	720	720	720	720	720	720	720	720	720	720	720	720
	October	744	744	744	744	744	744	744	744	744	744	744	744	744	744	744	744	744	744	744	744	744
	November	720	458	720	720	720	720	720	720	458	720	720	720	720	720	458	720	720	720	720	458	720
	December	744	744	744	744	744	744	744	744	744	744	744	744	744	744	744	744	744	744	744	744	744
Total	8256	7248	8256	8280	8256	8256	8256	8256	7272	8256	8256	8256	8280	8256	7248	8256	8280	8256	8256	8256	7272	8256
Hours Dispatched		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
January	744	692	692	682	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692
February	672	625	625	647	625	625	625	625	647	625	625	625	625	625	625	625	647	625	625	625	647	625
March	240	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228
April	720	677	677	677	677	677	677	677	677	677	677	677	677	677	677	677	677	677	677	677	677	677
May	744	707	707	707	707	707	707	707	707	707	707	707	707	707	707	707	707	707	707	707	707	707
June	720	684	684	684	684	684	684	684	684	684	684	684	684	684	684	684	684	684	684	684	684	684
July	744	714	714	714	714	714	714	714	714	714	714	714	714	714	714	714	714	714	714	714	714	714
August	744	714	714	714	714	714	714	714	714	714	714	714	714	714	714	714	714	714	714	714	714	714
September	720	684	684	684	684	684	684	684	684	684	684	684	684	684	684	684	684	684	684	684	684	684
October	744	0	707	707	707	707	707	707	0	707	707	707	707	707	0	707	707	707	707	707	0	707
November	720	429	677	677	677	677	677	677	429	677	677	677	677	677	429	677	677	677	677	677	429	677
December	744	692	692	698	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692
Total Hours Dispatched	8256	6851	7808	7808	7808	7808	7808	7808	6873	7808	7808	7808	7808	7808	6851	7808	7828	7808	7808	7808	6873	7808
Percentage of Available Hours	100.00%	84.52%	94.54%	94.54%	94.54%	94.54%	94.54%	94.54%	94.51%	94.54%	94.54%	94.54%	94.54%	94.54%	84.52%	94.54%	94.54%	94.54%	94.54%	94.54%	84.51%	94.54%
Percentage of Annual Hours	94.25%	78.20%	89.10%	89.11%	89.10%	88.10%	88.10%	88.10%	78.24%	88.10%	89.10%	89.11%	89.10%	89.10%	78.20%	89.10%	89.11%	89.10%	89.10%	89.10%	78.24%	89.10%
Average Annual Load	95.00%	88.58%	98.51%	98.51%	98.51%	98.51%	98.51%	98.51%	88.58%	98.51%	98.51%	98.51%	98.51%	98.51%	88.58%	98.51%	98.51%	98.51%	98.51%	98.51%	88.58%	98.51%

F1602E-31

UNIT DISPATCH INFORMATION:	January-01	February-01	March-01	April-01	May-01	June-01	July-01	August-01	September-01	October-01	November-01	December-01	2001
Hours Available for Dispatch	744	744	744	744	744	744	744	744	744	744	744	744	
Percentage of Hours Dispatched	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	89.53%
Average Dispatched Load	183.88	183.88	183.88	183.88	183.88	183.88	183.88	183.88	183.88	183.88	183.88	183.88	2,350.29
Fuel Fired tons	131.616	131.616	131.616	131.616	131.616	131.616	131.616	131.616	131.616	131.616	131.616	131.616	1,917.002
Total Ash (100% up) - tons	143.718	143.718	143.718	143.718	143.718	143.718	143.718	143.718	143.718	143.718	143.718	143.718	88.935
Total Limestone (100% up) - tons	23.984	23.984	23.984	23.984	23.984	23.984	23.984	23.984	23.984	23.984	23.984	23.984	23.984
Total Flyash/Limestone Load - tons	112.899	112.899	112.899	112.899	112.899	112.899	112.899	112.899	112.899	112.899	112.899	112.899	112.899
Heat Rate Information:													
Unit Gross Heat Rate - BTU/KWh	263,301,377	263,301,377	263,301,377	263,301,377	263,301,377	263,301,377	263,301,377	263,301,377	263,301,377	263,301,377	263,301,377	263,301,377	2,921,795,923
Net Generation	9,408	9,408	9,408	9,408	9,408	9,408	9,408	9,408	9,408	9,408	9,408	9,408	9,408
Plant Net Heat Rate - BTU/KWh	248,919,801	248,919,801	248,919,801	248,919,801	248,919,801	248,919,801	248,919,801	248,919,801	248,919,801	248,919,801	248,919,801	248,919,801	2,761,097,147
Gross Capacity Factor:	9.95%	9.95%	9.95%	9.95%	9.95%	9.95%	9.95%	9.95%	9.95%	9.95%	9.95%	9.95%	9.95%
UNIT DISPATCH INFORMATION:	January-02	February-02	March-02	April-02	May-02	June-02	July-02	August-02	September-02	October-02	November-02	December-02	2002
Hours Available for Dispatch	744	744	744	744	744	744	744	744	744	744	744	744	
Percentage of Hours Dispatched	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	77.10%
Average Dispatched Load	202.48	202.48	202.48	202.48	202.48	202.48	202.48	202.48	202.48	202.48	202.48	202.48	2,440.77
Fuel Fired tons	140,097	140,097	140,097	140,097	140,097	140,097	140,097	140,097	140,097	140,097	140,097	140,097	1,395,910
Total Ash (100% up) - tons	7,705	7,705	7,705	7,705	7,705	7,705	7,705	7,705	7,705	7,705	7,705	7,705	76,776
Total Limestone (100% up) - tons	2,222	2,222	2,222	2,222	2,222	2,222	2,222	2,222	2,222	2,222	2,222	2,222	21,886
Total Flyash/Limestone Load - tons	9,938	9,938	9,938	9,938	9,938	9,938	9,938	9,938	9,938	9,938	9,938	9,938	98,661
Heat Rate Information:													
Unit Gross Heat Rate - BTU/KWh	252,803,026	252,803,026	252,803,026	252,803,026	252,803,026	252,803,026	252,803,026	252,803,026	252,803,026	252,803,026	252,803,026	252,803,026	2,515,670,138
Net Generation	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428
Plant Net Heat Rate - BTU/KWh	238,760,860	238,760,860	238,760,860	238,760,860	238,760,860	238,760,860	238,760,860	238,760,860	238,760,860	238,760,860	238,760,860	238,760,860	2,377,467,973
Gross Capacity Factor:	9.97%	9.97%	9.97%	9.97%	9.97%	9.97%	9.97%	9.97%	9.97%	9.97%	9.97%	9.97%	9.97%
UNIT DISPATCH INFORMATION:	January-03	February-03	March-03	April-03	May-03	June-03	July-03	August-03	September-03	October-03	November-03	December-03	2003
Hours Available for Dispatch	744	744	744	744	744	744	744	744	744	744	744	744	
Percentage of Hours Dispatched	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	80.2%
Average Dispatched Load	202.48	202.48	202.48	202.48	202.48	202.48	202.48	202.48	202.48	202.48	202.48	202.48	2,440.77
Fuel Fired tons	140,097	140,097	140,097	140,097	140,097	140,097	140,097	140,097	140,097	140,097	140,097	140,097	1,395,910
Total Ash (100% up) - tons	7,705	7,705	7,705	7,705	7,705	7,705	7,705	7,705	7,705	7,705	7,705	7,705	76,776
Total Limestone (100% up) - tons	2,222	2,222	2,222	2,222	2,222	2,222	2,222	2,222	2,222	2,222	2,222	2,222	21,886
Total Flyash/Limestone Load - tons	9,938	9,938	9,938	9,938	9,938	9,938	9,938	9,938	9,938	9,938	9,938	9,938	98,661
Heat Rate Information:													
Unit Gross Heat Rate - BTU/KWh	252,803,026	252,803,026	252,803,026	252,803,026	252,803,026	252,803,026	252,803,026	252,803,026	252,803,026	252,803,026	252,803,026	252,803,026	2,515,670,138
Net Generation	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428
Plant Net Heat Rate - BTU/KWh	238,760,860	238,760,860	238,760,860	238,760,860	238,760,860	238,760,860	238,760,860	238,760,860	238,760,860	238,760,860	238,760,860	238,760,860	2,377,467,973
Gross Capacity Factor:	9.97%	9.97%	9.97%	9.97%	9.97%	9.97%	9.97%	9.97%	9.97%	9.97%	9.97%	9.97%	9.97%
UNIT DISPATCH INFORMATION:	January-04	February-04	March-04	April-04	May-04	June-04	July-04	August-04	September-04	October-04	November-04	December-04	2004
Hours Available for Dispatch	744	744	744	744	744	744	744	744	744	744	744	744	
Percentage of Hours Dispatched	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	80.2%
Average Dispatched Load	202.48	202.48	202.48	202.48	202.48	202.48	202.48	202.48	202.48	202.48	202.48	202.48	2,440.77
Fuel Fired tons	140,097	140,097	140,097	140,097	140,097	140,097	140,097	140,097	140,097	140,097	140,097	140,097	1,395,910
Total Ash (100% up) - tons	7,705	7,705	7,705	7,705	7,705	7,705	7,705	7,705	7,705	7,705	7,705	7,705	76,776
Total Limestone (100% up) - tons	2,222	2,222	2,222	2,222	2,222	2,222	2,222	2,222	2,222	2,222	2,222	2,222	21,886
Total Flyash/Limestone Load - tons	9,938	9,938	9,938	9,938	9,938	9,938	9,938	9,938	9,938	9,938	9,938	9,938	98,661
Heat Rate Information:													
Unit Gross Heat Rate - BTU/KWh	252,803,026	252,803,026	252,803,026	252,803,026	252,803,026	252,803,026	252,803,026	252,803,026	252,803,026	252,803,026	252,803,026	252,803,026	2,515,670,138
Net Generation	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428
Plant Net Heat Rate - BTU/KWh	238,760,860	238,760,860	238,760,860	238,760,860	238,760,860	238,760,860	238,760,860	238,760,860	238,760,860	238,760,860	238,760,860	238,760,860	2,377,467,973
Gross Capacity Factor:	9.97%	9.97%	9.97%	9.97%	9.97%	9.97%	9.97%	9.97%	9.97%	9.97%	9.97%	9.97%	9.97%
UNIT DISPATCH INFORMATION:	January-05	February-05	March-05	April-05	May-05	June-05	July-05	August-05	September-05	October-05	November-05	December-05	2005
Hours Available for Dispatch	744	744	744	744	744	744	744	744	744	744	744	744	
Percentage of Hours Dispatched	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	80.2%
Average Dispatched Load	202.48	202.48	202.48	202.48	202.48	202.48	202.48	202.48	202.48	202.48	202.48	202.48	2,440.77
Fuel Fired tons	140,097	140,097	140,097	140,097	140,097	140,097	140,097	140,097	140,097	140,097	140,097	140,097	1,395,910
Total Ash (100% up) - tons	7,705	7,705	7,705	7,705	7,705	7,705	7,705	7,705	7,705	7,705	7,705	7,705	76,776
Total Limestone (100% up) - tons	2,222	2,222	2,222	2,222	2,222	2,222	2,222	2,222	2,222	2,222	2,222	2,222	21,886
Total Flyash/Limestone Load - tons	9,938	9,938	9,938	9,938	9,938	9,938	9,938	9,938	9,938	9,938	9,938	9,938	98,661
Heat Rate Information:													
Unit Gross Heat Rate - BTU/KWh	252,803,026	252,803,026	252,803,026	252,803,026	252,803,026	252,803,026	252,803,026	252,803,026	252,803,026	252,803,026	252,803,026	252,803,026	2,515,670,138
Net Generation	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428
Plant Net Heat Rate - BTU/KWh	238,760,860	238,760,860	238,760,860	238,760,860	238,760,860	238,760,860	238,760,860	238,760,860	238,760,860	238,760,860	238,760,860	238,760,860	2,377,467,973
Gross Capacity Factor:	9.97%	9.97%	9.97%	9.97%	9.97%	9.97%	9.97%	9.97%	9.97%	9.97%	9.97%	9.97%	9.97%

Assumed Tax (per ton of Carbon): \$40

Sub-
Bituminous

Facility Net Heat Rate (HHV):	BTU/KWH	9,956
HHV of Coal:	BTU/#	8,500
Percent Carbon in Coal (WT)		48.30%
Unit Capacity:	MW	373
Carbon Loss:		0.25%
Molecular Weight of Carbon		12.01
Molecular Weight of O2		32.00
Price per MMBtu from Coal		1.11
Price per Ton of Coal (delivered)	per Ton	\$30.00
Net KWH Produced:		2,761,097,147
Coal Fired	Tons	1,617,002
Carbon in Flue Gas	Tons	781,012
CO2	Tons	2,861,804
Fuel Cost:	Total	\$48,631,344
	\$/kwh	\$0.0176
	Carbon Tax:	\$31,240,484
	per KWH	\$0.0113
	per MMBtu	\$1.14

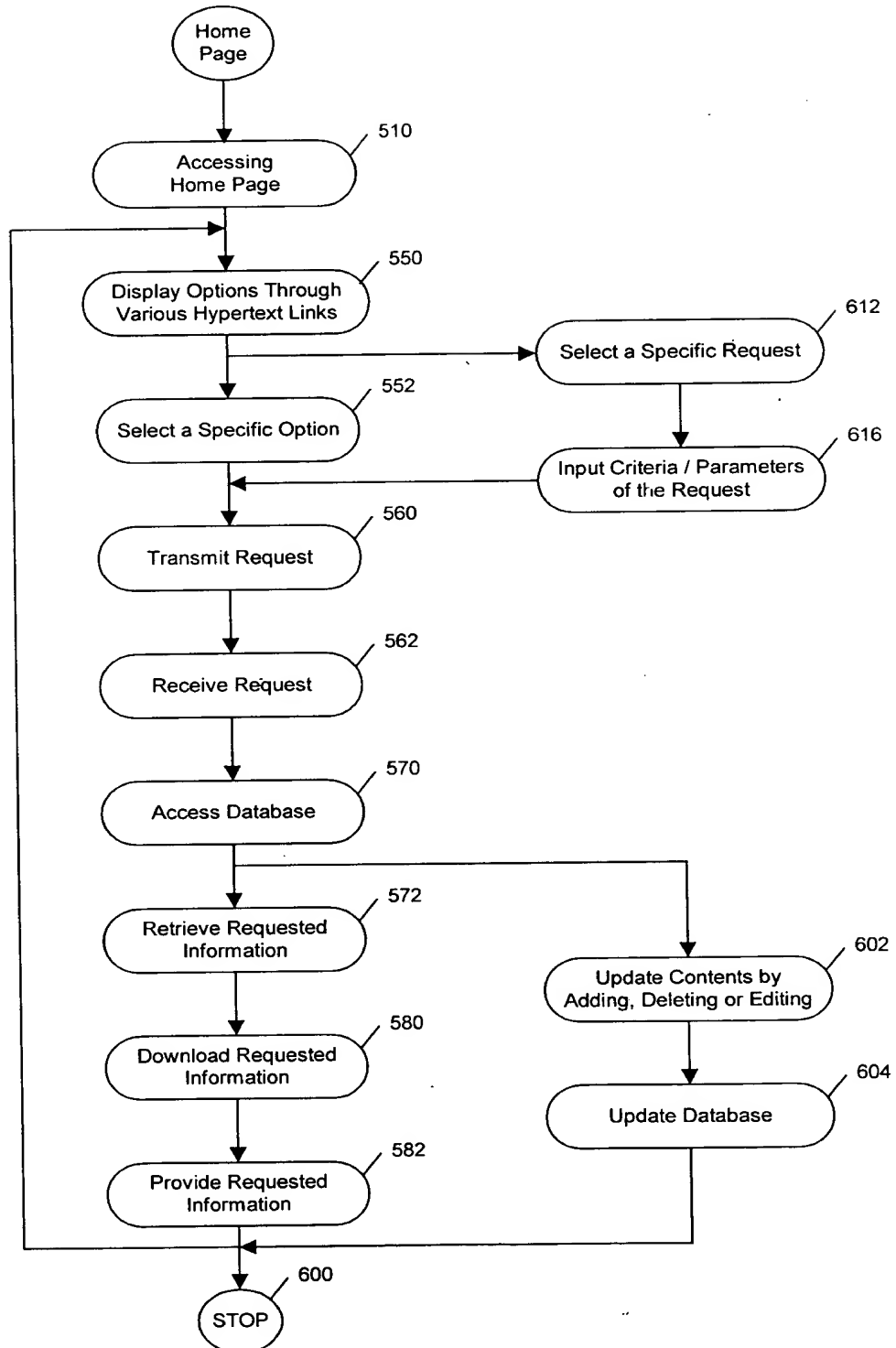
Tons CO2/kWh

0.001036473

FIGURE-32

FIGURE 33

500



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